



DEPARTMENT OF THE NAVY
NAVAL SUPPORT ACTIVITY WASHINGTON
1411 PARSONS AVENUE ST STE. 303
WASHINGTON NAVY YARD DC 20374-5003

5090
Ser N4/257
May 5, 2016

Ms. Karen Crumlish
Chief, Drinking Water Branch (3WP21)
EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Karen Crumlish:

SUBJECT: TOTAL COLIFORM REPORT, U.S. NAVAL OBSERVATORY

Enclosed is the Total Coliform Report for the monitoring period April 2016 for the U.S. Navy Observatory.

If you have any questions or require further information, please contact Mr. Dane Bowker, Public Works Department Drinking Water Program Manager at 202-433-4191 or email: dane.bowker@navy.mil.

Sincerely,

A handwritten signature in blue ink that reads "Durant S. Graves".

DURANT S. GRAVES
Installation Environmental Program Director
By direction of the Commanding Officer

Enclosures: 1. Total Coliform Report
2. Certificate of Analysis
3. Disinfectant Residual Reporting

Total Coliform Report Summary: April 2016

Location: NSF Naval Observatory

PWS ID: DC0000005

Number of Routine Samples Required: 1

Number of Routine Samples Taken: 1

Number of Routine Samples Coliform +: 0

Number of Routine Samples Fecal Coliform+: 0

Percentage of Samples Disinfectant Not Detected: **0

Number of Repeat Samples Required: 0

Number of Repeat Samples Taken: 0

Number of Repeat Samples Coliform+: 0

Number of Repeat Samples Fecal Coliform+: 0

| Building Number | Proposed Sampling Days | Sampling Location | Total Coliform pos/neg | pH | Residual Chlorine mg/L | Temp (C) | HPC (cfu/mL) | Chlorine & HPC* "V" (Y/N) |
|-----------------|--------------------------|-----------------------------|------------------------|------|------------------------|----------|--------------|---------------------------|
| NSF-OBSY 59 | First Half of Each Month | Preparation Kitchen in Sink | Negative | 8.15 | 1.42 T/ 1.19 F | 16.7 | N/A | N/A |
| | | | | | | | | |
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| | | | | | | | | |
| | | | | | | | | |

*Record Yes when (1) Chlorine < 0.10 mg/L and HPC is either not measured or HPC > 500 cfu/mL or (2) Chlorine is not measured and HPC > 500 cfu/mL.
 ** Equal to the number of Yes in column titled "Chlorine & HPC*" divided by the sum of the Number of Routine and Repeat Samples Taken and the number of instances when HPC is monitored but residual chlorine is not monitored.



Fredericktowne

ENVIRONMENTAL TESTING

Labs Inc.

3020 Ventrie Court • P.O. BOX 245 • Myerstown, MD 21773 • 800-332-3340 • FAX 301-293-2366
www.fredericktownelabs.com • info@fredericktownelabs.com

Analysis Results

Account No.: 9466 - 15-5

NOBSY

Date Received: Wednesday, April 06, 2016

Collected By: Gayan Kularathne
Inspection Experts, Inc.

Date Reported: Thursday, April 07, 2016

Matrix: Drinking Water

| Lab# | Parameter | Result | Limit of Detection | Method | Start | | End | | Analyst |
|--|--------------------------|-------------|--------------------|-------------|----------------|------|----------------|------|---------|
| | | | | | Date | Time | Date | Time | |
| Source: - NSF - OBSY- 59 Type: Grab Collection Date: 4/6/2016 - 11:55 | | | | | | | | | |
| 9466-15-5-1 | Total Coliforms | Abs. /100ml | 1 /100ml | 9223B | 04/06/16-14:45 | | 04/07/16-15:02 | | JD |
| 9466-15-5-2 | Chlorine - Total (Field) | 1.42 ppm | 0.1 ppm | SM4500-Cl G | On Site | | | | GK |
| 9466-15-5-3 | Chlorine - Free (Field) | 1.19 ppm | 0.1 ppm | SM4500-Cl G | On Site | | | | GK |
| 9466-15-5-4 | pH (Field) | 8.15 | | 4500-H+B | On Site | | | | GK |
| 9466-15-5-5 | Temperature (Field) | 16.7 deg. C | -20 deg. C | 2550 | On Site | | | | GK |

Notes:

1. mg/l stands for milligrams per liter and is nearly synonymous with parts per million
ug/l stands for micrograms per liter and is nearly synonymous with parts per billion
2. < stands for "less than" and indicates that the component in question was not detected (i.e. was less than the detection limit)
3. All analyses performed using EPA accepted methods in accordance with Title 40 Code of Federal Regulations Part 141 & 143. Method references: (1) Methods for the Chemical Analysis of Water & Wastewater EPA-600/4-79-020, (2) Standard Methods for the Examination of Water Wastewater - AWWA 19th /20th eds.
4. "*" denotes an analysis that was subcontracted to a State of Maryland approved lab.
5. Information concerning field pH and chlorine for bacteriological samples may be found on the chain of custody form.

Verified by:

S. Delawie 4-8-16
M. L. Miller, Ph.D.
Laboratory Director

Fredericktowne Labs is a State Certified Water Quality Laboratory
MD Cert. No.: 116 VA Cert. No.: 444
MDOT WBE Cert. No.: 91-158

CHAIN OF CUSTODY

FREDERICKTOWNE LABS, INC.
 3020 VENTRIE CT., PO BOX 245, MYERSVILLE, MD 21773
 301-293-3340 OR FAX 301-293-2366

| FTL Acct. No.: 9466-15-5 | | Compliance Sample (regulated): Yes <input type="checkbox"/> No <input type="checkbox"/> | | Collected By: GAYAN KULARATHNE | | | | | | | | | | Analyses To Be Performed | | | | | |
|-------------------------------------|------------------|---|-----------------|---------------------------------------|------|-------------------------|---------|---|-----------|---|--|--------------------|--|--------------------------|--|--|--|--|--|
| Project: NOBSY | | Affiliation: Inspection Experts, Inc. | | | | | | | | | | T.C. P/A (SM9223B) | | | | | | | |
| Field Sample ID | Site Description | Collection Date | Collection Time | Matrix DW/WW | pH | Total Cl | Free Cl | Temp | Grab/Comp | Preservation | | | | | | | | | |
| | NSF - OBSY - 59 | 4/6/2016 | 1155 | DW | 8.15 | 1.42 | 1.19 | 16.7 | G | Na2S2O3 & Ice | | | | | | | | | |
| Relinquished By: <i>[Signature]</i> | | Date/Time: 04/06/16 12:57 | | Received By: <i>[Signature]</i> | | Date/Time: 4/6/16 12:57 | | Treatment Devices Present: Yes <input type="checkbox"/> No <input type="checkbox"/> | | Describe Treatment Device(s): | | | | | | | | | |
| Relinquished By: <i>[Signature]</i> | | Date/Time: 4/6/16 13:53 | | Received By: <i>[Signature]</i> | | Date/Time: 4/6/16 13:53 | | Lead & Copper Samples - Water Last Used: | | Date: Time: | | | | | | | | | |
| Relinquished By: <i>[Signature]</i> | | Date/Time: | | Received By: <i>[Signature]</i> | | Date/Time: | | Method of Shipment: <i>[Signature]</i> | | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | | | | | | | | | |
| Relinquished By: <i>[Signature]</i> | | Date/Time: | | Received By: <i>[Signature]</i> | | Date/Time: | | Condition of Sample(s) upon Receipt: | | 3.20 | | | | | | | | | |

Disinfectant Residual Reporting

Systems must report the following (40 CFR 141.134(c)):

- (i) The number of samples taken during each month of the last quarter.
- (ii) The monthly arithmetic average of all samples taken in each month for the last 12 months.
- (iii) The arithmetic average of the monthly averages for the last 12 months.
- (iv) Whether, based on Sec. 141.133(c)(1), the MRDL was violated.

Step 1:

- a. Enter data from the current month of monitoring, including begin and end dates for sample collection.
- b. The disinfectant residual data entered is that monitored at the same time and place as coliform samples are collected. The number of samples collected should equal the number of coliform samples collected during the month (including repeat coliform samples).
- c. If you did not monitor for free chlorine during the month, leave those cells blank.

| | |
|--|----------|
| Monthly sample collection begin date: | 4/6/2016 |
| Monthly sample collection end date: | 4/6/2016 |

| Parameter | # of Samples | Monthly Average | Min | Max |
|-------------------------------------|--------------|-----------------|------|------|
| Free Cl2 | 1 | 1.19 | 1.19 | 1.19 |
| Total CL2 - Chloramine disinfection | | | | |
| Total CL2 - Chlorine disinfection | 1 | 1.42 | 1.42 | 1.42 |

Step 2:

- a. Drop the oldest month of data and add the most recent month.
- b. Enter the current month's data (average, minimum, maximum) into the RAA calculation, below.
- c. If you did not monitor for free chlorine during the month, leave those cells blank.
- d. This spreadsheet will automatically calculate the running annual average based on the monthly averages.
- e. At the end of the quarter (March, June, September, December), the running annual average of monthly averages (RAA) is used to determine compliance with the MRDL.
- f. The RAA averages at the end of the quarter are necessary for CWSs to prepare CCRs.

| | | Total Chlorine | | | Free Chlorine | | |
|--------------------|------|-----------------|------|------|-----------------|------|------|
| | | Monthly average | Min | Max | Monthly average | Min | Max |
| May | 2015 | 2.30 | 2.30 | 2.30 | | | |
| June | 2015 | 2.50 | 2.50 | 2.50 | | | |
| July | 2015 | 1.11 | 1.11 | 1.11 | | | |
| August | 2015 | 2.60 | 2.60 | 2.60 | | | |
| September | 2015 | 2.40 | 2.40 | 2.40 | | | |
| October | 2015 | 0.48 | 0.48 | 0.48 | | | |
| November | 2015 | 0.91 | 0.91 | 0.91 | | | |
| December | 2015 | 1.05 | 1.05 | 1.05 | | | |
| January | 2016 | 0.84 | 0.84 | 0.84 | | | |
| February | 2016 | 1.70 | 1.70 | 1.70 | | | |
| March | 2016 | 2.50 | 2.50 | 2.50 | 0.11 | 0.11 | 0.11 |
| April | 2016 | 1.42 | 1.42 | 1.42 | 1.19 | 1.19 | 1.19 |
| Running Avg | | 1.7 | | | 0.7 | | |

RAA Summary

| | | Total Chlorine | Free Chlorine |
|-----------|------|----------------|---------------|
| JUNE | 2015 | 2.2 | |
| SEPTEMBER | 2015 | 2.2 | |
| DECEMBER | 2015 | 1.9 | |
| March | 2016 | 2.5 | 0.11 |

The highest value of RAA for Total Chlorine is necessary for CWSs to prepare CCRs.